

# ADDENDUM

Owner  Contractor   
Architect  Field

Project Name: JHS Renovation  
Tulia I.S.D.  
702 NW 8<sup>th</sup> Street  
Tulia, TX 79088

Addendum No.: **Three (3)**  
Date: April 5, 2010  
Project No.: 09077

This addendum shall be considered part of the Contract Documents for the above mentioned project as though it has been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents, this Addendum shall govern and take precedence.

Bidders are hereby notified that they shall make any necessary adjustments in their estimates on account of this Addendum. It will be construed that each Bidder's proposal is submitted with full knowledge of all modifications and supplemental data specified herein.

## General Items:

- Item No. One:** In the Specifications, Section 15777 – Ductless Cooling Only Split Systems. See attached spec section 15777.
- Item No. Two:** In the Drawings, sheet M1-HVAC Demo Plan, Note #3 should read the same as note #1 except for “above second floor ceiling.”
- Item No. Three:** In the Drawings, sheet M2-HVAC PLAN – SECOND FLOOR, Add wall mounted duct free split system at location shown. Mount condensing unit on roof on 4x4 red wood runners covered in single ply roofing material and mount wall unit at location shown as high as possible. Route condensate lines from FC1 down wall through floor to ceiling space below, and connect to condensate drain pipe serving F&C5 as shown on supplemental drawing SD-6 and SD-7 attached herewith.
- Item No. Four:** In the Drawings, Sheet E5 – Electrical Schedules and Riser, add circuits to panel DPB (Section 2) to serve CND1 and FC1 as shown on the supplemental drawing SD-8 attached herewith.

END OF ADDENDUM

## SECTION 15777 – DUCTLESS COOLING ONLY SPLIT SYSTEMS

### 1. **DESCRIPTION OF WORK:**

1.1. Types of equipment required for this project include the following:

- Fancoil Unit
- Pad-Mounted Condensing Unit

### 2. **QUALITY ASSURANCE:**

2.1. UL Compliance: Provide devices electrical components which have been listed and labeled by Underwriters Laboratories.

### 3. **SUBMITTALS:**

- 3.1. Product Data: Submit manufacturer's specifications, including rated capacities, weights, and installation instructions.
- 3.2. Wiring Diagrams: Submit product wiring diagrams clearly indicating all required field electrical connections, to include connections between different pieces of equipment.
- 3.3. Maintenance Data: Submit maintenance data for each piece of equipment.

## **PART 2 - PRODUCTS**

### 4. **FANCOIL UNIT:**

- 4.1. General: Provide factory-fabricated, self contained fancoil assembly of types, sizes, capacities, and ratings indicated; consisting of those components and accessories required for a complete installation; constructed with manufacturer's standard materials and components, and manufacturer designed for the application indicated. Provide units with the following components and performance features:
- 4.2. Cooling capacity: Provide ceiling cassette duct-free fancoil type cooling. Coil shall be supplied complete with controls, drain connections, refrigerant piping connections, and unit casing (if required). Coil shall be a standard manufacturer's product designed for use with the heat pump Unit submitted and designed for the refrigerant proposed.
- 4.3. Heating Capacity: Provide cooling-only system.
- 4.4. Short-Cycle Control: Provide controls to prevent short cycling of compressors.

### 5. **CONDENSING UNIT:**

- 5.1. General: Provide a factory-assembled and tested air-cooled condensing unit as indicated, consisting of a compressor, condenser coil, fan, motor, refrigerant reservoir, and operating controls. Provide capacity and electrical characteristics as scheduled.
- 5.2. Casing: Provide 18 gage galvanized steel casing finished with baked enamel. Provide removable panel for access to control, and weep holes for water drainage. Provide base with mounting holes. Provide brass service valves, fittings and gauge ports on exterior of casing.
- 5.3. Compressors: Provide welded, fully hermetic units with crankcase heaters, vibration isolators, tested to operate at 45 deg F. Provide with 5 year warranty.
- 5.4. Coils: Construct coil of copper tubes and aluminum fins, provided with liquid accumulator and liquid sub-cooler. Provide aluminum propeller fan, direct driven, with permanently lubricated fan motor with thermal overload protection.
- 5.5. Cooling System Efficiency: Provide heat pump unit so that the entire system has a EER-rating of 11.0 and/or an SEER-rating of 13.0, minimum.

## **PART 3 - EXECUTION**

### 6. **INSTALLATION OF FANCOIL UNITS:**

- 6.1. The fancoil installation shall conform to the requirements contained in NFPA 90A or 90B as applicable.
- 6.2. Suspensions for mounting equipment and accessories including supports, vibration isolator stands, guides, and brackets shall be provided. Suspension for equipment shall conform to the recommendations of the manufacturer.

- 6.2.1. Mount fancoil cassette in ceiling per manufactures instructions.
- 6.3. Equipment shall be located as indicated and in such a manner that working space is available for necessary servicing, such as replacing or adjusting drives, motors, air filters, and automatic controls. Electrical isolation shall be provided between dissimilar metals for the purpose of minimizing galvanic corrosion. The interior of cabinets or casings shall be cleaned before completion of installation.
- 6.4. Provide condensate drainage line from FC's primary drains.

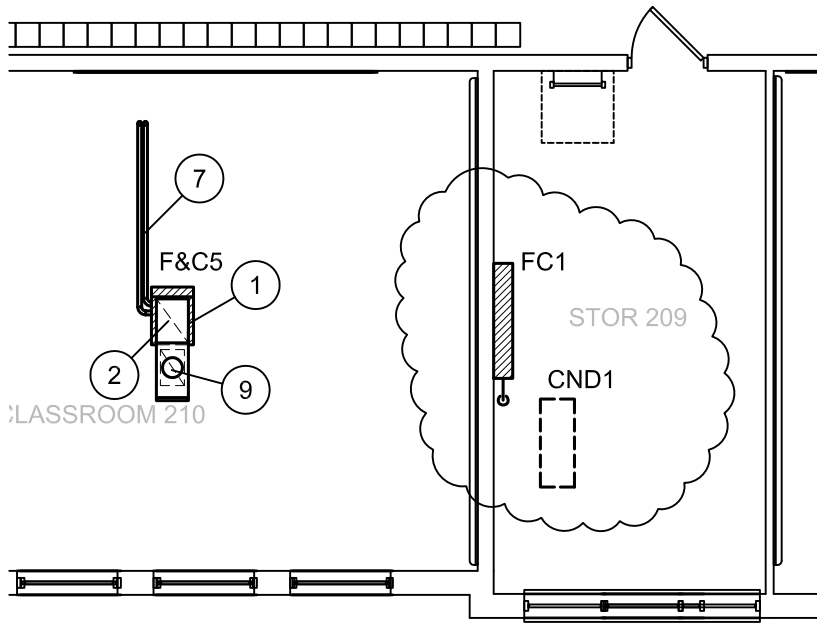
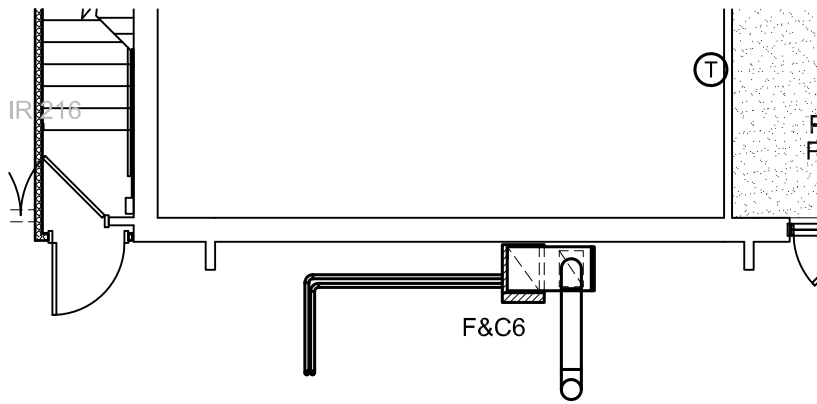
**7. INSTALLATION OF AIR-COOLED CONDENSING UNIT:**

- 7.1. Install condensing Units in accordance with manufacturer's installation instructions. Install units plumb and level, firmly anchored in locations indicated, and maintain manufacturer's recommended clearances.
- 7.2. Install roof-mounted units on 4"x4" redwood runners.
- 7.3. Connect refrigerant piping to Condensing Unit in manner so as not to interfere with access to unit.

**8. STARTUP:**

- 8.1. Prior to startup, all equipment shall be cleaned, belts adjusted and air filter installed. Safety and operating controls shall be adjusted as necessary to place them in proper operation and sequence.
- 8.2. Startup equipment in accordance with manufacturer's startup instructions. Test controls and demonstrate compliance with requirements. Satisfactory operation of all temperature-regulation controls and safety controls shall be demonstrated.
- 8.3. All deficiencies discovered in the course of performance testing shall be corrected on site, if possible, or the defective device/component/equipment shall be replaced and a new item installed. Testing shall resume with equipment repair or replacement.

END OF SECTION 15777



# HVAC PLAN - SECOND FLOOR

SCALE: 1/8"=1'-0"

SUPPLEMENTAL DRAWING NO. SD-6

M2



FC/CONDENSING UNIT SCHEDULE										
SYM	AIR			COOL		HEAT		ELEC		REMARKS CARRIER
	CFM	SP	%OA/OA	Qt	Qs	Qh	FUEL	HP/MCA	SERVICE	
FC1	900	0.2	-	34.7	24.0	-	-	0.55	208/1PH	40-QNC-036-3
CND1	--	--	105	35.1	--	--	--	18.0	208/3PH	38-HDF-036-5

SUPPLEMENTAL DRAWING NO. SD-7

M3



09077 JHS Renovation  
TULIA, TEXAS  
Date: 5-Apr-10

## PANEL DPB (SECTION 2)

CCT	SERVES	BRANCH CKT.			BRANCH CKT.			SERVES	CCT
		WIRE	CONDUIT	TRIP	TRIP	CONDUIT	WIRE		
43	F&C1	#12	1/2"	20A	20A	1/2"	#12	F&C12	44
45	F&C2	#12	1/2"	20A	20A	1/2"	#12	F&C13	46
47	F&C3	#12	1/2"	20A	20A	1/2"	#12	F&C14	48
49	F&C4	#12	1/2"	20A	20A	1/2"	#12	F&C15	50
51	F&C5	#12	1/2"	20A	30A	1/2"	#12	CND1	52
53	F&C6	#12	1/2"	20A	30A	1/2"	#12	"	54
55	F&C7	#12	1/2"	20A	30A	1/2"	#12	"	56
57	F&C8	#12	1/2"	20A	20A	1/2"	#12	FC1	58
59	F&C9	#12	1/2"	20A	20A	1/2"	#12	"	60
61	F&C10	#12	1/2"	20A	--	--	--	BLANK	62
63	F&C11	#12	1/2"	20A	--	--	--	BLANK	64
65	BLANK	--	---	---	--	--	--	BLANK	66
67	BLANK	--	---	---	--	--	--	BLANK	68
69	IWH1	#8	3/4"	40A	--	--	--	BLANK	70
71	"	#8	3/4"	40A	--	--	--	BLANK	72
73	IWH3	#12	1/2"	20A	--	--	--	BLANK	74
75	"	#12	1/2"	20A	--	--	--	BLANK	76
77	IWH2	#8	3/4"	40A	--	--	--	BLANK	78
79	"	#8	3/4"	40A	--	--	--	BLANK	80
81	BLANK	--	---	20A	--	--	--	BLANK	82
83	BLANK	--	---	20A	--	--	--	BLANK	84

SUPPLEMENTAL DRAWING NO. SD-8

E5



Grimes & associates

Architecture - Engineering - Environmental - Construction Management

09077 JHS RENOVATION  
TULIA, TEXAS  
Date: 15-Apr-09